

ABSTRACT OF THE DISCLOSURE

Halogen-containing polymer compositions comprising a latent mercaptan-containing heat stabilizer composition substantially free from the offensive odor typically associated with mercaptans are protected during processing by the degradation products of the latent (i.e., blocked) mercaptan which include a free mercaptan. Other products of the degradation are believed to include carbocations of the blocking moiety which are stabilized by a molecular structure in which the electron deficiency is shared by several groups. The latent mercaptan may be the sole heat stabilizer additive but the free mercaptan released during processing may also synergize the activity of metal-based heat stabilizers such as metal salts and organometallic stabilizers such as organotin carboxylates and mercaptides in the polymer composition. The odor of primary mercaptan-containing heat stabilizers in halogenated polymer compositions is masked by a small amount of a latent mercaptan. The latent mercaptans also serve as intermediates in the preparation of anti-oxidants, anti-microbial agents, photostabilizers, and primary heat stabilizers. Highly effective heat stabilizers are prepared by the condensation of formaldehyde and a para-phenol and further condensation of the crude product with a mercapto-containing compound.